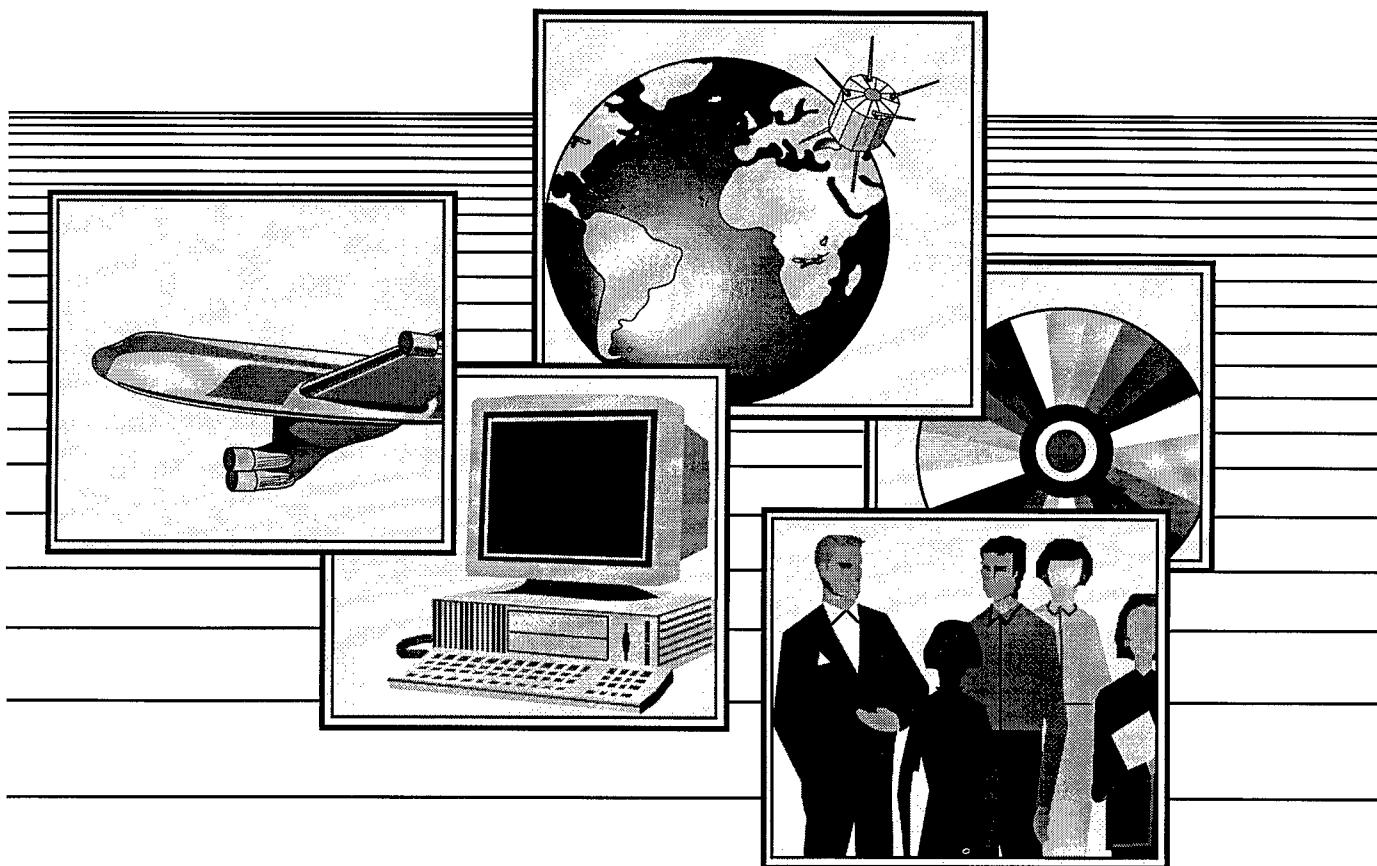


INFORMATION SHARING: A GUIDE FOR INVESTING IN HUMAN CAPITAL FOR THE 21ST CENTURY



***Using Information Technology
for Increased Capabilities***



U.S. Department of Transportation
Federal Aviation Administration

November 1994

THE FAA

Serving our customers and ourselves by providing

THE RIGHT INFORMATION

IN THE RIGHT FORM

TO THE RIGHT PEOPLE

AT THE RIGHT TIME.



U.S. Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Subject: **ACTION:** Information Sharing Resource

Date:

NOV 21 1994

From: Assistant Administrator for Information Technology,
AIT-1

Reply to
Attn. of:

To: All AMT Members

Today we are entering an information and communications revolution with consequences--seen and unforeseen--as profound any we have experienced. People can exchange information instantly and easily--across the hall, across the nation, and around the globe. We, as FAA leaders, have often spoken of the necessity for all of our knowledge-workers to be better informed about how information and its enabling technology are resources for addressing critical mission and business outcomes. This publication, *Information Sharing: A Guide for Investing in Human Capital for the 21st Century--Using Information Technology for Increased Capabilities*, is intended as a resource for you and your staff to identify specific organizational and individual learning needs and to discover learning opportunities.

This guide is consistent with several other broad initiatives underway within the FAA and the Department of Transportation (DOT). The FAA's Human Resource Management organization has developed a performance framework and a competency model which identifies agencywide references for defining, assessing, and developing individual, team, and organization excellence. These efforts are general in nature, and provide a broad baseline for expected FAA competencies.

This publication's framework highlights the specific capabilities essential for managing and using information for business decisionmaking. It also offers guidelines to assist us in making informed long-term investments in our people.

A handwritten signature in black ink, appearing to read "THERON A. GRAY".

Theron A. Gray

FOREWORD

“Each of us must keenly understand the potential of accurate and timely information and its supporting technologies across the full range of our safety, security, and business executive decisionmaking.”

We, at the Federal Aviation Administration (FAA), are acutely aware that we live in times of constant and rapid change. New technological developments continue at a dizzying pace, with yesterday's breakthroughs becoming today's norm. As such, each of us must be poised to meet the business challenges and exploit the advanced technologies in our ever-changing environment.

To progress and succeed, we need quality information. Each of us must keenly understand the potential of accurate and timely information and its supporting technologies across the full range of safety, security, and business executive decisionmaking efforts affecting air travel now and into the next century. We must continue to improve our planning, management, and use of this important corporate resource.

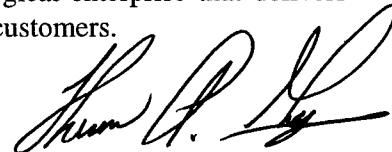
As demands for information increase, as we reinvent processes and design corporate infrastructures, we must remember that progress begins and ends with the human factor. It is our goal to provide our knowledge-workers—executives, managers, and staff alike—with the best information, the best analysis, and the best technologies available.

We invite agency leadership to use this document to identify what FAA personnel at every level should know about how to fit business needs with information technology (IT) resources. It is a guide to use when we make tough decisions on how to target limited training dollars more effectively. It also is helpful for individual employees to use in identifying goals for professional development, for self-development outside of FAA, and, on a broader scale, to realize the mission of the FAA.

This guide is consistent with major ongoing Human Resource Management initiatives directed toward performance competencies within the FAA. It reinforces this theme by providing detailed information about the specific IT-related skills and abilities needed by FAA's workforce to make sure our efforts are properly focused.

“It is our goal to provide our knowledge-workers with the best information, the best analysis and the best technologies available.”

We reinforce our commitment to FAA's human capital as an investment in the agency's future. This commitment will propel us into the 21st century as an effective, knowledge-based technological enterprise that delivers service for its customers.



Theron A. Gray
Assistant Administrator
for Information Technology

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INVESTING IN THE FUTURE

The nature of work and the way today's organizations relate to that work are changing. In these times of budget constraints, the reality is to do better with less. Governmentwide initiatives are in place to redesign, reinvent, and reinvigorate the Federal Government, making it:

- More responsive to its customers;
- More streamlined; and
- More efficient and less expensive.

The workforce also is changing. It is more mobile and diverse, and as the focus of expertise narrows, it seems simultaneously less and better educated.

The Federal Aviation Administration (FAA) must meet ever present challenges and take advantage of this new business environment. To support improved services through providing more timely and accurate information to all customers, the FAA must maximize the potential of information technology (IT).

IDENTIFYING A NEED

The need for the FAA to focus more on this potential was first verified in a 1990 FAA Information Resources Management Quality Task Force Study and a 1991 General Accounting Office (GAO) report about the

"Management isn't about guessing, it's about knowing. Those in positions of responsibility must have the information they need to make good decisions. Good managers have the right information at their fingertips. . . . Good information comes from good information systems."

—Report of the National Performance Review*
September 1993

FAA's Information Resources Management (IRM) program. The findings directed the FAA to increase management knowledge of IRM principles, practices, and technologies; this should positively impact the way the agency does business. More recently, Vice President Gore's Report of the National Performance Review* addressed the need to develop a multiskilled workforce that improves individual and organizational performance.

UNDERSTANDING THE BUSINESS AND TECHNOLOGICAL CHALLENGES

To benefit fully from a knowledge-based technological enterprise, IT providers must better understand customers' business needs. Customers within the FAA must also better understand how IT tools can help them achieve maximum efficiency. IT providers therefore must form a partnership with their

*From *Red Tape to Results: Creating a Government That Works Better & Costs Less*. September, 1993.

customers to accommodate the effects and needs of the changing workforce in both communities. The intent of this document is to foster a better understanding of using information technology as a corporate resource, and with this understanding, to plan for and invest in the future. Applying the principles in this document will help better satisfy customers' needs and help those customers achieve their goals and objectives.

DEVELOPING A PORTFOLIO

Implementing a coordinated information exchange about IT-related topics for the entire FAA is an ambitious undertaking. This document is one step of guiding management and staff in understanding the learning necessary to plan for and use IT well into the next century. It presents a framework from which to make informed management decisions concerning the content, context, and speed of incorporating learning about how FAA business needs and IT resources can be fitted to each other.

This document should provide management with a foundation for identifying and prioritizing their respective organization's education and training needs in the area of IT. By using the guidelines presented, management and staff can anticipate, reinforce, and further develop skills for specific types of positions. Therefore, this document is designed to provide a map or menu which permits, as appropriate, individual organizations to

select information exchange opportunities according to their own needs and resources.

WHAT SHOULD KNOWLEDGE-WORKERS KNOW?

This document identifies the key skills and abilities needed for FAA employees to use IT as a productive resource. While many FAA managers and staff already exhibit these competencies, their identification serves as a benchmark to reinforce or foster growth in these areas.

UNDERSTANDING THE PARAMETERS

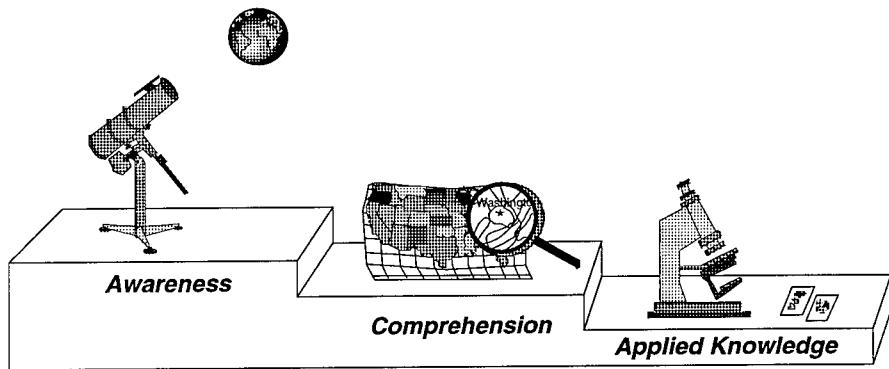
Accompanying matrixes and charts for the audiences targeted in this document address specific content areas and levels of understanding. The table that follows clarifies the terms used in subsequent pages of this document. Three main elements are considered: 1) *audience*, 2) *subject matter*, and 3) *depth of knowledge or levels of learning detail*.

WHO THE LEARNERS ARE

Every employee at every level in the FAA plays an important part in the management and use of IT. Each of the five target audiences identified in the table should have an understanding, applicable to their positions, of corporate business needs and the IT resources to address them.

ENSURING TOTAL SOLUTIONS: COMPONENTS OF INFORMATION EXCHANGE

***Note:** Audience titles may apply to job positions and/or job functions; refer to discussion on page 5.



THREE LEVELS OF LEARNING DETAIL

How Much to Learn

The three levels detailing the depth of understanding are difficult to define. These levels—awareness, comprehension, and applied knowledge—cannot be precisely measured and depend on both the audience and the subject matter. Whereas awareness presents a high-level view, applied knowledge encompasses the most detail. This concept is similar to ways of viewing the world: an observer can look at the expansive universe through a telescope and see the “big picture,” can view details of a picture of the Earth using a magnifying glass, or can inspect molecules of soil with a microscope.

WHAT TO LEARN

The Information Exchange Matrix on page 6 provides a quick summary of the subject area focus for each audience according to subject matter modules and depth of understanding. The Corporate Challenge Module is listed first, followed by the IT Management Module, and then the Information Technologies Module.

Subsequent charts (pps. 8-13) present information about targeting Learning Competencies so audiences may benefit from the information exchange at the right time, or appropriately sequenced for their kind of work. Educational needs of a workforce must always be balanced against time and money. The timeframe to implement this guide is long-range.

Appendices A-E contain the syllabuses of Information Exchange Sources that will support and develop the Learning Competencies identified for each audience. Information exchange may occur in a multitude of settings and circumstances, ranging from brochures and briefings to formal training. The syllabuses present *examples* of sources; they are not intended, nor is it possible, to include all relevant and available Information Exchange Sources nationwide.

The important task for information exchange is to continue gaining the rewards that come from learning and applying new knowledge to the challenges at hand. Knowledgeable personnel, at whatever level, are the most important source for progress in the FAA.

INFORMATION EXCHANGE CONTENT SUMMARY MATRIX

The matrix that follows displays an overview of the awareness, comprehension, and applied knowledge subject matter for each module and for each audience, at a level of learning detail appropriate for their agency positions. The amount of detailed learning for each level depends on the audience.

For example:



Both Executives and IT Specialists will be exposed to the Information Technologies module at awareness and comprehension levels.



IT Specialists also will be exposed to greater detail at the applied knowledge level, which is geared toward the technical aspects of IT.

Although the guide identifies five specific target audiences (e.g., Executives), audience titles may apply to types of responsibilities or job functions for employees working alone or as part of teams. For example, the term “Executive” not only can refer to members of the Senior Executive Service, but other senior staff responsible for organizational effectiveness or broad organizational leadership. The term “Manager” can also refer to senior staff responsible for effective operation of organizational units.

Generally, all target audiences will develop a high-level awareness of all the topics. Some audiences will go on to develop a deeper comprehension of some of the topics. Others will not only develop an awareness and comprehension of some of the topics, but will also develop a working knowledge and skill in those topics.

INFORMATION EXCHANGE CONTENT SUMMARY MATRIX

Audience	Level of Learning Detail	Subject Matter Modules			
		Corporate Challenges	Information Management	Technology	Information Technologies
Executives	Awareness	Vision, Business/IT environment & trends, changing workforce	Mission, goals, CIO role	Federal, FAA & defacto standards	
	Comprehension	Business/IT planning, business re-engineering, resource management	IT policies, roles, responsibilities	FAA architectures, emerging technologies (electronic commerce)	
Managers	Awareness	Vision	Mission, goals, CIO/IRMs/OICs/IS manager roles, FIRMR	Federal, FAA & defacto standards	
	Comprehension	IT environment, planning/evaluation (strategic, operational), business re-engineering (analysis, CASE), measurement	IT policies, roles, responsibilities	FAA architecture, data management (repository, paperwork management), standards promotion, security, electronic commerce, hardware/software/telecom	
IT Managers	Awareness	Vision	Mission, goals, CIO, IRMs/OICs/IS manager roles	FAA architecture & standards	
	Comprehension	Business/IT environment, management skills, FAA mission & functions	Legislation, regulations, directives, FIRMR	Emerging technologies, imaging, open systems (GOSIP/POSIX), business reengineering	
	Applied Knowledge	Strategic & operational planning, business analysis, resource management, measurement	Operational management, change management & implementation	Data management (repository, paperwork), CASE, security, hardware/software/telecom, EDI	
IT Specialist	Awareness	Business/IT environment, vision, IT trends, changing workforce	Mission, goals, CIO role, FIRMR	FAA architecture & standards, data management (repository, paperwork management)	
	Comprehension	IT environment, business re-engineering, end-user relationships	IT policies, roles & responsibilities, FIRMR, IRMs/OICs/IS manager roles	Standards (use, maintenance), open systems (GOSIP/POSIX)	
	Applied Knowledge	Business analysis methodologies & techniques, measurement		Systems analysis methodologies, CASE tools, hardware/software, telecom(LANs/WANS/topology/client server), EDI, security	
IT Customers (Internal)	Awareness	Vision, IT environment, IT trends	Mission, goals, CIO role, IT policies & role	FAA architecture & standards	
	Applied Knowledge			Specific job related training	
IT Customers (External)	Awareness	Vision, business environment, IT environment, IT trends	Mission, goals, CIO role, IT policies & role	FAA architecture & standards	

INFORMATION EXCHANGE LEARNING COMPETENCIES

The charts which follow provide greater detail on the Learning Competencies each of the five targeted audiences should possess. Executives, Managers, and IT Managers will better understand the need to plan, acquire, manage, and use information technology in making business decisions and conducting business processes. IT Specialists will develop the specific abilities to use IT effectively. IT Customers, both internal and external, will understand how information technology assists the agency in carrying out its mission; and they will also understand the specific tools necessary for agency workers to perform their jobs. These competencies reinforce the needed partnerships between the FAA business organizations and IT providers.

REAPING THE REWARDS

This guide identifies the competencies necessary for the FAA's management and staff to better focus and maximize information technologies for business needs. It also provides examples of resources to help develop those competencies.

By reinforcing these competencies, the FAA will have better equipped personnel to meet the challenges of heading into the 21st century—the challenges of reinventing government, streamlining, and increased expectations for providing expanded services with fewer resources. The agency's major resource, its people, will have the background to exploit technology and the information it provides as an enabler of sound decisionmaking to continuously improve service to FAA's customers, and provide:

*The Right Information
In the Right Form
To the Right People
At the Right Time.*

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR EXECUTIVES

Senior FAA management, the members of the Administrator's Management Team (AMT).

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none"> • Recognition of the rapidly changing business environment. • Ability to plan and work within a fluid environment effectively utilizing all available resources, and in particular, IT. 	<ul style="list-style-type: none"> • The mission, goals, and objectives of IT management, along with the policies and procedures for implementation. • Get the right information to the right person in the right format at the right time. 	<ul style="list-style-type: none"> • Familiarity with the FAA-wide, federal government, and defacto standards along with the purpose for these standards.
Objectives:	<ul style="list-style-type: none"> • Commitment to the use of IT as a strategic management asset. • Development of strategic business plans that incorporate IT capabilities. 	<ul style="list-style-type: none"> • Recognition by the FAA managers of the CIO and IT as integral business partners in accomplishing the FAA mission. • A commitment to provide support to all IT mission critical initiatives. 	<ul style="list-style-type: none"> • A commitment to promote and support IT standards that will lead to a fully integrated, effective and efficient FAA IT architecture.
Comprehension	<ul style="list-style-type: none"> • Identification of the leadership and management skills necessary to make the best use of IT. • Knowledge of the ways to use IT as a tool to accomplish organizational objectives. • Broad, overview knowledge of IT strategic analysis methodologies, and what to expect from them. • The appropriate use and interpretation of measurement. 	<ul style="list-style-type: none"> • The factors in the federal IRM and FAA environment that shape IT management. • The use of FAA guidelines to simplify the incorporation of IT into business operations. 	<ul style="list-style-type: none"> • Knowledge of the strengths and weaknesses of rapidly evolving information technologies and system development methodologies. • Understanding of the need for enterprise-wide architectures. • Ability to use IT to maintain, and increase productivity among the changing workforce.
Objectives:	<ul style="list-style-type: none"> • Effective utilization of IT resources. • Better IT alignment with client operations and a visible top management commitment to the process. 	<ul style="list-style-type: none"> • Acceptance of the IT guidelines and promotion of their implementation. 	<ul style="list-style-type: none"> • User identification and support of realistic opportunities for technological innovation.

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR MANAGERS

The mid-management staff of FAA, defined as second level supervisors and above. This does not include IT managers.

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none"> • Recognition of the rapidly changing business environment. • Ability to plan and work within a fluid environment effectively utilizing all available resources, and in particular, IT. 	<ul style="list-style-type: none"> • The mission, goals, and objectives of IT management, along with the policies and procedures for implementation. • Get the right information to the right person in the right format at the right time. 	<ul style="list-style-type: none"> • Awareness of the FAA-wide standards and methodologies, along with the purpose for these standards. • Familiarity with the current and planned FAA IT environment.
Objectives:	<ul style="list-style-type: none"> • Development of strategic/tactical business plans that make good use of IT capabilities. 	<ul style="list-style-type: none"> • Recognition of the CIO and IT as integral business partners in accomplishing the FAA mission. • Pro-active cooperation between IT and program & administrative areas. • A commitment to provide support to IT mission critical initiatives. 	<ul style="list-style-type: none"> • A commitment to promote and support IT standards that will lead to a fully integrated, effective and efficient FAA IT architecture.
Comprehension	<ul style="list-style-type: none"> • Identification of the planning and management skills necessary to make the best use of IT. • Understanding of Life Cycle Management concepts. • Overview of IT strategic/business area analysis methodologies, and what to expect from their implementation. • The appropriate use and interpretation of measurement. 	<ul style="list-style-type: none"> • The factors in the federal IRM and FAA environment that shape IT management. • The use of FAA guidelines, policies, and responsibilities to incorporate IT into business operations. • Management expertise to efficiently use IT operations. 	<ul style="list-style-type: none"> • Knowledge of the costs and benefits of "cutting edge" information technologies and system development methodologies. • Understanding the need for enterprise-wide architectures and security.
Objectives:	<ul style="list-style-type: none"> • Effective utilization of IT resources and better planning for acquisition of systems. • IT alignment with business objectives and management commitment to the system development process. • Effective management in all Life Cycle Management phases. 	<ul style="list-style-type: none"> • Acceptance of the IT guidelines and promotion of their implementation. 	<ul style="list-style-type: none"> • Ability to use IT to maintain, and increase productivity among the changing workforce. • User identification of realistic opportunities to apply new technologies.

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR IT MANAGERS

The supervisory/management officials responsible for IT operations in the FAA. This includes Information Resource Managers (IRMs).

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none"> Recognition of the rapidly changing business environment. Ability to plan and work within a fluid environment effectively utilizing all available resources, and in particular, IT. 	<ul style="list-style-type: none"> The mission, goals, and objectives of IT management, along with the policies and procedures for implementation. Get the right information to the right person in the right format at the right time. The new team roles for the CIO and IT with the customers. 	<ul style="list-style-type: none"> Awareness of the FAA-wide standards and the purpose for these standards. Familiarity with the current and planned FAA IT environment.
Objectives:	<ul style="list-style-type: none"> Pro-active, long term management. Support and commitment from this key mid-management group. 	<ul style="list-style-type: none"> Recognition of the user business community as integral partners in accomplishing the FAA IT mission. Pro-active cooperation between IT and program operations. 	<ul style="list-style-type: none"> A commitment to assist in the creation, promotion, and support of IT standards (including architectures) in all development.
Comprehension	<ul style="list-style-type: none"> Leadership, resource management, and planning skills necessary to facilitate this transformation. Knowledge of the mission, function, and structure of the FAA. 	<ul style="list-style-type: none"> Requirements of federal, department, and agency guidelines, directives, and legislation on the IT mission. FIRMR guidelines. 	<ul style="list-style-type: none"> Knowledge of the capabilities of "cutting edge" IT's, such as imaging, open systems, EDI, systems architectures, business re-engineering, etc.
Objectives:	<ul style="list-style-type: none"> A motivated, service oriented workforce. Increased identification of IT staff with the agency mission. 	<ul style="list-style-type: none"> Commitment to IT guidelines and promotion of their implementation. Understanding the importance of quality customer relations. 	<ul style="list-style-type: none"> Recognition of realistic business opportunities to apply new technologies cost effectively.
Applied Knowledge	<ul style="list-style-type: none"> Increased skill levels for strategic planning, acquisition cycle management, budgeting, and program reviews. The appropriate use and interpretation of measurement. 	<ul style="list-style-type: none"> Skill to develop operational level plans that fully integrate with IT strategic direction. Ability to implement and monitor these tactical plans. 	<ul style="list-style-type: none"> Ability to use IT management tools such as data management/repository, re-development, I-CASE, paperwork management, etc.
Objectives:	<ul style="list-style-type: none"> Effective long range plans with accurate resource forecasting. 	<ul style="list-style-type: none"> Unified, clear direction for FAA IT through the strategic and operational plans. 	<ul style="list-style-type: none"> Better management of IT technical direction, and IT staff is up-to-date on industry directions.

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR IT SPECIALISTS

Non-managerial staff responsible for the design, development, and delivery of IT service for the FAA.

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none"> • Recognition of the rapidly changing business environment. • Ability to plan and work within this fluid environment effectively utilizing all available resources, and in particular, IT. 	<ul style="list-style-type: none"> • The mission, goals, and objectives of IT management, along with the policies and procedures for implementation. • The new roles for IT service staff. • Get the right information to the right person in the right form at the right time. 	<ul style="list-style-type: none"> • The FAA-wide standards and architectures, and the purpose for these standards. • Familiarity with data management practices.
Objectives:	<ul style="list-style-type: none"> • Support and commitment from the IT staff during the changes. 	<ul style="list-style-type: none"> • Recognition of the direction of the organization. • Understanding the importance of quality customer relations. 	<ul style="list-style-type: none"> • A commitment to assist in the creation, promotion, and support of IT standards (including architectures) in all development.
Comprehension	<ul style="list-style-type: none"> • Ability to better interact with the user community in the development of business solutions. • Knowledge of business re-engineering. 	<ul style="list-style-type: none"> • Requirements of federal, department, and agency guidelines/legislation on the IT mission. 	<ul style="list-style-type: none"> • Knowledge of the implications of current defacto, federal government, and FAA-wide standards, and the ability to implement them.
Objectives:	<ul style="list-style-type: none"> • Knowledge of the FAA mission, function, and organizational structure. 	<ul style="list-style-type: none"> • Acceptance of the IT guidelines and active promotion of their implementation. 	<ul style="list-style-type: none"> • Standardized IT environment that will increase effectiveness and reduce costs.
Applied Knowledge	<ul style="list-style-type: none"> • Knowledge of business analysis techniques such as systems re-engineering, systems integration, security, etc. • The appropriate use and interpretation of measurement 		<ul style="list-style-type: none"> • Ability to use the new techniques and methodologies utilized by the FAA such as CASE, LAN/SWANS, telecom, EDI, client-server, languages, etc.
Objectives:	<ul style="list-style-type: none"> • Increased identification of IT staff with the agency mission. 		<ul style="list-style-type: none"> • Identify realistic opportunities for new technologies. • Delivery of quality service and products to FAA IT customers.

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR IT CUSTOMERS--INTERNAL

All other FAA staff not falling into the above categories who are general or day-to-day IT users.

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none"> • Recognition of the rapidly changing business environment. • Ability to plan and work within a fluid environment effectively utilizing all available resources, and in particular, IT. 	<ul style="list-style-type: none"> • The mission, goals, and objectives of IT management, along with the policies and procedures for implementation. • Get the right information to the right person in the right form at the right time. 	<ul style="list-style-type: none"> • Familiarity of the FAA-wide standards and the purpose for these standards.
Objectives:	<ul style="list-style-type: none"> • Development of strategic business plans that incorporate IT capabilities. 	<ul style="list-style-type: none"> • Recognition of the role of the CIO and IT in the mission of FAA. • Recognition of IT as a management resource. 	<ul style="list-style-type: none"> • A commitment to promote and support IT standards in the operation of information systems.
Applied Knowledge Objectives:			<ul style="list-style-type: none"> • Ability to use IT tools to accomplish their daily work. • Improved use of IT systems and software.

INFORMATION EXCHANGE LEARNING COMPETENCIES FOR IT CUSTOMERS--EXTERNAL

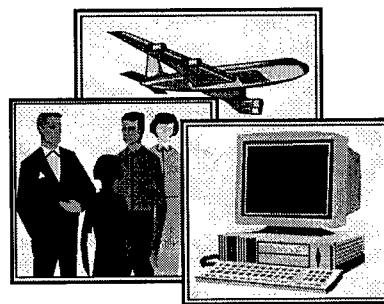
Non-FAA individuals and organizations who use or monitor FAA IT resources.

Level of Learning Detail	Corporate Challenges	IT Management	Information Technologies
Awareness	<ul style="list-style-type: none">Recognition of the FAA strategy for responding to the rapidly changing business environment.FAA's ability to plan and work within a fluid environment effectively utilizing all available resources, and in particular, IT.	<ul style="list-style-type: none">The mission, goals, and objectives of IT management, along with the policies and procedures for implementation.	<ul style="list-style-type: none">Familiarity with FAA-wide standards and the purpose for these standards.Familiarity with current and planned FAA IT architectures.
Objectives:	<ul style="list-style-type: none">Understanding of the FAA culture and strategic vision, including IT.	<ul style="list-style-type: none">Recognition of the role of the CIO and IT in the mission of FAA.	

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APPENDIXES A - E

***INFORMATION EXCHANGE SYLLABUSES
ACCORDING TO AUDIENCE***



INFORMATION EXCHANGE SYLLABUSES ACCORDING TO AUDIENCE

The objective of the syllabuses which follow is to outline and give examples of information exchange sources that will support and develop the Information Exchange Learning Competencies identified for each audience. The syllabuses are not intended, nor is it possible, to include all current and relevant Information Exchange Resources throughout the nation. The sources available to the reader are not limited to the examples presented in this current document. The sources listed are to provide readers with a place to begin researching information about providers. For additional information exchange opportunities, readers should check with local sources such as FAA organizations' training coordinators, FAA Human Resource Management organizations, professional organizations, local or community universities and colleges, and private vendors.

Selection criteria vary according to the type of provider. In choosing an appropriate information exchange resource, the reader may want to consider and weigh the following criteria for each provider type according to their individual/organizational needs and resources.

Information Exchange Resource Selection Criteria

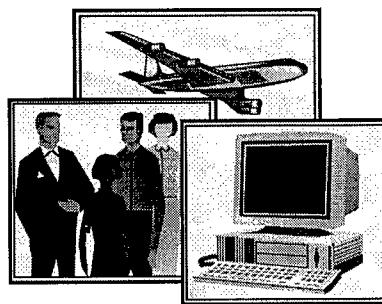
<u>Provider Type</u>	<u>Selection Criteria</u>
Government	Contractor Experience*
Private	Course Objectives
College/University	Course Warranty* Cost Credit Hours** Duration Hands on Training vs. Lecture Target Audience Instructor's Qualifications Location Methodology/Technology Relevance Prerequisites Understanding of Federal/Government Entities*

*Specifically for Private Providers

**Specifically for College/University Providers

APPENDIX A

INFORMATION EXCHANGE SYLLABUS FOR EXECUTIVES



INFORMATION EXCHANGE SYLLABUS

EXECUTIVES

FOCUS: Corporate Challenges--Managing Change

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
"Information Technology; Tools for Success"		The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.	FAA	
Corporate Challenges	2-3 hours	Presentation: Establishes awareness of the changing corporate environment among senior executives. Given by a CIO from a successful federal ITM organization (i.e. DoD); a top executive from a large IT corporation (i.e. IBM); or a recognized expert in IT (i.e. James Martin).	FAA	
FAA IT Strategic Vision and Plan	1 hour	Briefing: Gives an overview of the current vision for IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.	FAA	
Rightsizing Information Systems	1 day	How to empower the changing organization with IT.	Performance Development Corporation	(800) 554-9131
Information Systems Issues for the 90's	4 hours	Informal discussion of the key IT issues facing management in the 90's.	James Martin & Co.	(703) 620-9504
The Context for Corporate Change	1 day	How to act as the change agent for your organization.	INDEX Senior Management Seminar	(703) 620-8888
Exploiting the New Corporate Flexibility	1 day	How to turn the changing corporate environment into a strategic opportunity.	INDEX Senior Management Exchange	(703) 620-8888
Creating a Customer-Driven Government	4 hours	Seminar: Overview of 10 modules which integrates Malcolm Baldrige National Quality Award criteria, Government Performance and Results Act, and National Performance Review Concepts, etc.	Federal Quality Institute, OPM	(202) 376-3747
Special Topic Workshops on Change	1-3 days (or custom)	Agency-focused workshops on Benchmarking, Cultural Change and Valuing Diversity, Human Side of Downsizing, Business Process Reengineering, etc.	Federal Quality Institute, OPM	(202) 376-3747

INFORMATION EXCHANGE SYLLABUS

EXECUTIVES

FOCUS: Corporate Challenges--Managing Change (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Business Process Reengineering	1 day	Provides managers with a basic understanding of how the application of BPR can result in dramatic improvements.	James Martin & Co.	(703) 620-9504
Business Process Reengineering	2 hours (or custom)	Provides executives or managers with a basic understanding of how the application of BPR can result in dramatic improvements.	Andersen Consulting	(512) 320-5871

FOCUS: Corporate Challenges--IT Strategic Planning

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Information Systems Seminar for Executives	1 day	Information as a strategic resource in the current environment.	DOD IRM College	(202) 287-9321
Strategic Visioning	1 day	Provides an initial understanding of the Strategic Visioning approach and how to initiate the process.	James Martin & Co.	(703) 620-9504

FOCUS: IT Management--IT Roles & Responsibilities

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
IT Management	1-2 hours	Presentation: Establishes awareness of IT management in the FAA including planning, management, reporting, and oversight of internal and external responsibilities and requirements. This could be a part of an executive conference devoted to IT issues.	FAA	
FAA IT "success stories"	1 hour	Presentation: Successful implementation of IT in the FAA; highlights the advantages of the IT-provider business partnership.	FAA	

INFORMATION EXCHANGE SYLLABUS

EXECUTIVES

FOCUS: IT Management--Federal Regulatory Environment

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
The FAA IT Regulatory Environment	1 hour	Briefing by ALT for Executives on requirements/guidelines governing IT.	FAA	

FOCUS: Information Technologies--Methodologies and Technologies

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Information Technologies	1-2 hours	Presentation Series: Establishes awareness of the information technologies that support the FAA architectures, developed and delivered by FAA IT staff. This could also be part of an executive conference devoted to IT issues.	FAA	
Total Quality Management	1 day	Overview of the concepts and implementation of a TQM program.	James Martin & Co.	(703) 620-9504
Client/Server Computing: Strategic Directions and Tactical Solutions	2 days	How to assess, implement, and manage a client server environment.	Gartner Group Conference	(203) 967-6757
Society, Technology, and the New Corporation	1 day	How IT is shaping both society and the corporate environment.	INDEX Senior Management Interchange Courses	(703) 620-8888
Information Engineering Overview	1 day	Managerial overview of the Information Engineering methodology.	James Martin & Co.	(703) 620-9504
Living with Technology	1 day	Coping with the rapidly advancing technologies.	INDEX Senior Management Interchange Courses	(703) 620-8888
New Technologies and Organizational Innovation	1 day	How IT can facilitate organizational change.	INDEX Senior Management Interchange Courses	(703) 620-8888
Computer Security	1 hour	Briefing on the management impact of the Computer Security Act of 1987 and the importance of planning to address the Act's requirements.	FAA	

INFORMATION EXCHANGE SYLLABUS

FOCUS: Long Term Support Programs

DESCRIPTION	PROVIDER	PHONE NO.
Reports and seminars that provide concise, balanced outside perspectives on the information technology industry in such areas as Implementing a Systems Development Methodology, Electronic Commerce, Open Systems, Business Process Automation, Client Server, and Selecting CASE Strategies and Tools.	Gartner Group	(203) 964-0096
Specialized track for executives in dealing with IT issues.	GE Advanced Concepts Center - Executive Learning Track Gary Slaughter Corporation	(800) GE-TRAIN (813) 925-0925
IS Leadership, Management, and Teambuilding. A series of 1 day seminars for IS Executives covering subjects such as: Communication, Trust Building, Motivation and Empowerment, etc.	CSC/Index	(617) 499-1245
Index Foundation--A research and advisory service specializing in IT best practices.	Business Technology - Tribeca Research Inc.	(212) 431-8700
Monthly newsletter to help with successful use of IT in business.	Federal Quality Institute, OPM	(202) 376-3747
Advisory Services for Transforming Government tailored to fit individual needs.		

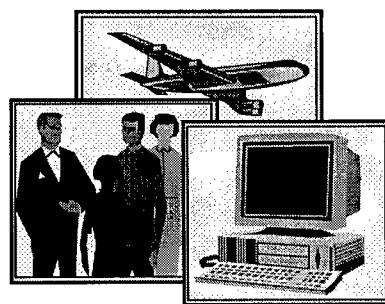
Note: For additional information exchange opportunities, readers should check with local sources such as FAA organizations' training coordinators, FAA Human Resource Management organizations, professional organizations, local or community universities and colleges, and private vendors.

EXECUTIVES

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APPENDIX B

***INFORMATION EXCHANGE SYLLABUS
FOR
MANAGERS***



INFORMATION EXCHANGE SYLLABUS

MANAGERS

FOCUS: <i>Corporate Challenges--Planning and Management</i>	TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
"Information Technology; Tools for Success"			The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.	FAA	
Corporate Challenges	2-3 hours		Presentation: Establishes awareness of the changing corporate environment among Managers. Given by a CIO from a successful federal IRM organization (e.g. DoD); a top executive from a large IT corporation (e.g. IBM); or a recognized expert in IT (e.g. James Martin).	FAA	
FAA IT Strategic Vision and Plan	2 hours		Presentation: Overview of the current vision for IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.	FAA	
Information Systems Issues for the 90's	4 hours		Informal discussion of the key IT issues facing management in the 90s.	James Martin & Co.	(703) 620-9504
Rightsizing Information Systems	1 day		How to empower the changing organization with IT.	Performance Development Corporation	(800) 554-9131
Identifying Strategic System Opportunities	2 days		Successful internal review methods for assessing business requirements and executive needs.	Technology Transfer Institute	(310) 394-8305
The Context for Corporate Change	1 day		How to act as the change agent for your organization.	INDEX Senior Management Seminar	(703) 620-8888
Exploiting the New Corporate Flexibility	1 day		How to turn the changing corporate environment into a strategic opportunity.	INDEX Senior Management Exchange	(703) 620-8888
Creating a Customer-Driven Government	4 hours		Seminar: Overview of 10 modules which integrates Malcolm Baldrige National Quality Award criteria, Government Performance and Results Act, and National Performance Review, etc.	Federal Quality Institute, OPM	(202) 376-3747

INFORMATION EXCHANGE SYLLABUS

FOCUS: Corporate Challenges-Planning and Management (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Creating a Customer-Driven Government	1-2-1/2 days (Custom and Train the Trainer sessions and materials)	Seminar: 10 modules integrating Malcolm Baldrige National Quality Award criteria, Government Performance and Results Act, and National Performance Review, etc.	Federal Quality Institute, OPM	(202) 376-3747
Special Topic Workshops on Change	1-3 days (or custom)	Agency-focused workshops on Benchmarking Cultural Change and Valuing Diversity, Human Side of Downsizing, Business Process Reengineering, etc.	Federal Quality Institute, OPM	(202) 376-3747
Caught in the Middle: The Middle Manager - Superior, Yet Subordinate	3 days	Review of techniques to aid the middle manager.	USDA Graduate School	(202) 447-3247
Managing Diversity - Workforce 2000	2 days	How to be successful managing the rapidly diversifying workforce.	USDA Graduate School	(202) 447-3247
Strategic Visioning	1 day	Provides an initial understanding of the Strategic Visioning approach and how to initiate the process.	James Martin & Co.	(703) 620-9504
Total Quality Management	1 day	Overview of the concepts and implementation of a TQM program.	James Martin & Co.	(703) 620-9504
Total Quality Management	1-5 days	How to implement and manage a TQM program	USDA Graduate School	(202) 382-8565
Business Process Reengineering	1 day	Provides managers with a basic understanding of how the application of BPR can result in dramatic improvements.	James Martin & Co.	(703) 620-9504
Business Process Reengineering	2 days	Teaches a practical set of BPR guidelines and techniques.	Performance Development Corporation	(800) 554-9131
Business Process Reengineering	2 hours (or custom)	Provides executives or managers with a basic understanding of how the application of BPR can result in dramatic improvements.	Andersen Consulting	(512) 320-5871

MANAGERS

INFORMATION EXCHANGE SYLLABUS

MANAGERS

FOCUS: Corporate Challenges--Planning and Management (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Business Process Reengineering	3 days	Discusses how to select, manage, and implement BPR projects.	Technology Transfer Institute	(310) 394-8305
Strategic Planning	2 days	Methodologies to develop and implement strategic planning in your organization.	USDA Graduate School	(202) 447-3247
Strategic Planning for Information Resources	2 days	How to enhance the business value of information resources.	DoD IRM College	(202) 287-9321
Process for Using Quantitative Data to Manage IT Projects and Activities	2 days	How to effectively use measurement to plan and manage IT projects.	Quality Assurance Institute	(202) 447-3247
Management by Objectives	1 day	How to implement and manage activities using MOBs.	USDA Graduate School	

FOCUS: IT Management--IT Roles & Responsibilities

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
IT Management	1 hour	Presentation: Establishes awareness of IT management in the FAA including planning, management, reporting, and oversight of internal and external responsibilities and requirements among managers in the FAA. A video of the presentation could be shown to all managers within the FAA.	FAA	
FAA IT "success stories"	2 hours	Presentation: A successful implementation of IT in the FAA that highlights the advantages of the IT-provider business partnership.	FAA	

FOCUS: IT Management--Federal Regulatory Environment

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
The FAA IT Regulatory Environment	1 hour	Briefing by AIT for Managers on requirements/guidelines governing IT.	FAA	

INFORMATION EXCHANGE SYLLABUS

MANAGERS

FOCUS: Information Technologies--Methodologies and Technologies			
TITLE	LENGTH	DESCRIPTION	PROVIDER
			PHONE NO.
Information Technologies	2 hours	Presentation: Establishes awareness of the information technologies that support the FAA architectures; developed and delivered by FAA IT staff.	FAA
FAA IT Architectures and Standards	2 hours	Overview of current FAA IT standards and how to utilize the approved architectures.	FAA
Using CORN and OATS	1 hours	How to utilize the established FAA contract vehicles to purchase IT equipment and software.	FAA
FAA Emerging Technologies Brown Bag Lunch Series	1 hour each	Ongoing series of lunch-time sessions concerned with various IT issues and technologies including data architectures, electronic commerce, paperwork management, repositories, CASE tools, hardware, and software.	FAA
Client/ServerComputing: Strategic Directions and Tactical Solutions	2 days	How to assess, implement, and manage a client server environment.	Gartner Group Conference (203) 967-6757
Information Management: The Next Generation	4 days	Future trends for the role of IT and how to incorporate them in your organization.	Delphi Consulting Group (617) 247-1025
Contemporary Issues in Information Systems	3 hrs/ week for 10 weeks	Examines emerging issues in areas such as artificial intelligence, multimedia, repositories, and client server.	George Washington University (202) 994-5257
New Architectures for Enterprise Computing	2 days	How to implement various system architectures to facilitate integrated development.	Technology Transfer Institute (310) 394-8305
Enterprise Engineering Workshop	1 day	How to integrate your organization's strategic vision with TQM, BPR, and IE.	James Martin & Company (703) 620-9504
Business Process Reengineering	1-3 days (or custom)	Proves understanding of how the application of BPR can result in dramatic improvements, and how to choose and conduct projects.	Andersen Consulting (512) 320-5871
Information Engineering	3 day	Overview of the Information Engineering methodology.	James Martin & Co. (703) 620-9504
Information Engineering	3 days	Managerial overview of the Information Engineering methodology.	Technology Transfer Institute (310) 394-8305

INFORMATION EXCHANGE SYLLABUS

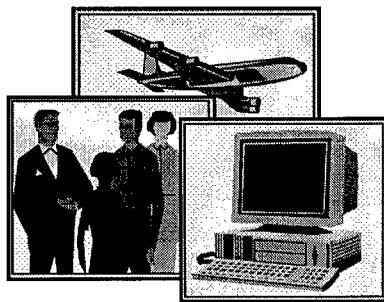
MANAGERS

FOCUS: Information Technologies--Methodologies and Technologies (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Mapping the Future	2 day	Understanding and exploiting the dynamics of the computer industry.	Technology Transfer Institute	(310) 394-8305
Information Engineering	5 days	Overview of the Information Engineering methodology.	DoD IRM College	(202) 287-9321
Computer Security	1-2 hours	Briefing on the management impact of the Computer Security Act of 1987 and the importance of planning to address the Act's requirements.	FAA	

APPENDIX C

**INFORMATION EXCHANGE SYLLABUS
FOR
INFORMATION TECHNOLOGY MANAGERS**



INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Corporate Challenges--FAA & IT Mission

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
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"Information Technology; Tools for Success"

The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.

FAA Strategic Vision and Plan 2 hours Presentation: Overview of the current vision for FAA and IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.

Presentation of FAA IT "success stories"

Presentation: A successful implementation of IT in the FAA that highlights the advantages of the IT-provider business partnership

FAA Mission Orientation 1 day A formal, structured session or a series of 1 hour presentations or videos, presenting speakers from all the business areas of FAA. They will discuss the operations of their business areas and how they support the mission of the FAA. A tour of a FAA field facility also will assist IT Managers to better identify with the FAA mission.

FOCUS: Corporate Challenges--Planning & Management

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Rightsizing Information Systems	1 day	Empowering the changing organization with IT.	Performance Development Corporation Delphi Consulting Group	(800) 554-9131 (617) 247-1025
Information Management: The Next Generation	4 days	How to manage IT into the 21st century.	Delphi Consulting Group	(617) 247-1025
Mapping the Future	2 days	Understanding and exploiting the dynamics of the computer industry, rather than just reacting.	Technology Transfer Institute	(310) 394-8305

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Corporate Challenges--Planning & Management (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Creating a Customer-Driven Government	1-2-1/2 days (Custom and Train the Trainer sessions and materials)	Seminar: 10 modules integrating Malcolm Baldrige National Quality Award criteria, Government Performance and Results Act, and National Performance Review, etc.	Federal Quality Institute, OPM	(202) 376-3747
Special Topic Workshops on Change	1-3 days (or custom)	Agency-focused workshops on Benchmarking Cultural Change and Valuing Diversity, Human Side to Downsizing, Business Process Reengineering, etc.	Federal Quality Institute, OPM	(202) 376-3747
Identifying Strategic System Opportunities	2 days	Successful internal review methods for assessing business requirements and executive needs.	Technology Transfer Institute	(310) 394-8305
Planning for Integrated Information Systems	2 days	Translating the business mission of the enterprise into well-defined, manageable IT projects.	Barnett Data Systems	(301) 762-1288
All About IRM	3 days	Conference: A variety of speakers on current IRM issues.	Barnett Data Systems	(301) 762-1288
Enterprise Engineering Workshop	1 day	Integrating your organization's strategic vision with TQM, BPR, and IE.	James Martin & Co.	(703) 620-9504
TQM	1 to 5 days	How to implement and manage a Total Quality Management Program.	USDA Graduate School James Martin & Co.	(202) 382-8565 (703) 620-9504
Leading and Supervising Technical Work Teams	2 days	Help participants successfully make the changeover from technical contributor to supervisory or leadership role.	Information Systems Institute	(301) 670-9020
Strategic Visioning	1 day	Provides an initial understanding of the Strategic Visioning approach and how to initiate the process.	James Martin & Co.	(703) 620-9504
Business Process Reengineering	1-3 days (or custom)	Proves understanding of how the application of BPR can result in dramatic improvements, and how to choose and conduct projects.	Andersen Consulting	(512)320-5871

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Corporate Challenges--Planning & Management (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Business Process Reengineering	1 to 3 days	Provide managers with a basic understanding of how the application of BPR and IT can result in dramatic improvements.	James Martin & Co. Performance Development Corporation Technology Transfer Institute	(703) 620-9504 (800) 554-9131 (310) 394-8305
Strategic Planning	2 days	How to use strategic planning in the federal government. Enhancing the business value of information resources.	USDA Graduate School	(202) 447-3247
Strategic Planning for Information Resources	2 days	Budgeting methods for the 90s. Implementation of federal budget guidelines.	DoD IRM College	(202) 287-9321
Strategic Budgeting	2 days	How to develop and present comprehensive budget plans.	USDA Graduate School	(202) 447-3247
Budget Execution and Funds Control	2 days	How to effectively use measurement to plan and manage IT projects.	USDA Graduate School	(202) 447-3247
Budget Planning, Development and Presentation	2 days		Quality Assurance Institute	(407) 363-1111
Process for Using Quantitative Data to Manage IT Projects and Activities	2 days		Performance Development Corporation Technology Transfer Institute	(310) 394-8305

FOCUS: IT Management--Roles & Responsibilities

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Trail Boss II	5 days	Senior Information Resource acquisition managers training on how to manage specialized GSAT procurement programs.	GSA	(202) 501-0819
IT Management Philosophy	2 hours	A presentation to establish awareness of the IT management philosophy among IT managers in the FAA. A video presentation is a possibility.	FAA	
Understand the Technologies of Business Computing	1 day	A business oriented view of IT.	Technology Transfer Institute	(310) 394-8305

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: IT Management--Federal IT Regulatory Environment

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
The FAA IT Regulatory Environment	4 hours	Seminar for IT Managers on the current federal laws, regulations and guidelines that IT must operate under.	FAA	
Information Access Laws	2 days	Implementation of Freedom of Information and Privacy Acts.	USDA Graduate School	(202) 447-3247

FOCUS: Information Technologies

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
FAA -IT Emerging Technologies Brown Bag Lunch Series	1 hour each	Ongoing series of lunch-time sessions concerned with various IT issues and technologies including data architectures, data administration, data management, paperwork management, repositories, CASE tools, EDI, hardware, and software.	FAA	
Using CORN and OATS	3 hours	How to fully utilize the OATS and CORN contracts.	FAA	
Information Systems Issues for the 90s	4 hours	Informal discussion of the key IT issues facing management in the 90s.	James Martin & Co.	(703) 620-9504
Contemporary Issues in Information Systems	3 hrs/wk for 10 wks	Examine emerging issues in areas such as Artificial Intelligence, Multimedia, and Object Oriented.	George Washington University	(202) 994-5257
Living with Technology	1 day	Coping with the rapidly advancing technologies.	INDEX Senior Management Interchange Courses	(703) 620-8888
Information Engineering	1 to 5 days	How to implement and manage the use of the Information Engineering system development methodology.	James Martin & Co. DoD IRM College Potomac Forum Performance Development Corporation Technology Transfer Institute	(703) 620-9504 (202) 287-9321 (703) 360-1700 (800) 554-9131 (310) 394-8305 (310) 394-8305
New Architectures for Enterprise Computing	2 days	How to implement various system architectures to facilitate integrated development.	Technology Transfer Institute	(310) 394-8305

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Information Technologies (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
The Data Warehouse: Design and Implementation	3 days	Detailed discussion of the design techniques and approaches needed to build the data warehouse.	Barnett Data Systems	(301) 762-1288
Introduction to Data Communications	3 days	Provides the basic knowledge needed to build a comprehensive understanding of the communications industry.	American Institute	(800) 345-8016
Data Administration and Data Architecture Seminar	3 days	Implementing and enhancing the data administration function in your organization.	Barnett Data Systems	(301) 762-1288
PCs: Bringing the Promise to Reality	2 days	Understanding and implementing Personal Communications Systems, including cellular, mobile data, and spread spectrum.	Telestrategies	(703) 734-7050
Computer Network Architectures and Protocols	4 days	Provides detailed knowledge and complete understanding of various network architectures.	Technology Exchange Co.	(800) 662-4282
Computer Security	3 days	The Computer Security Act of 1988 requires security training for all staff involved in ADP activities. This session meets those requirements.	Potomac Forum	(703) 360-1700
ADW Overview (CASE tools)	1 to 3 days	Provides a hands-on environment where the capabilities of the KnowledgeWare ADW I-CASE tool are examined.	KnowledgeWare Inc.	(800) 334-2662

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Information Technologies--Using the Technology

Many providers offer a wide variety of technical training courses. A sample of vendors and some of their offerings follows:

VENDOR	LENGTH	TITLE	PHONE NO.
Information Systems Institute	1 to 5 days	Data Communications and Networking Voice and Data Communication Integration Electronic Data Interchange (EDI) Electronic Imaging and Document Management Client Server Computing Local Area Networks The Advanced Intelligent Network Object Oriented Analysis and Design	(301) 670-9020
University Video Communications	1 to 4 hours	Distributed Computing Windows/User Interface Programming Communications/Networking Electronic Data Interchange (EDI) Theoretical Computer Science Robotics RISC Architecture	(415) 327-0131
Technology Transfer Institute	1 to 5 days	Business Area Analysis Object Oriented Databases Adding Image Processing to Information Systems Microsoft University Seminars Understanding the Technologies of Business Computing Integrating UNIX into the IBM Environment Windows Rapid Application Development	(310) 394-8305

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

FOCUS: Information Technologies--Using the Technology (continued)

VENDOR	LENGTH	TITLE	PHONE NO.
Learning Tree	1 to 5 days	Telecommunications Identifying and Confirming User Requirements Software Quality Assurance and Testing Software Systems Analysis and Design Object Oriented Analysis and Design Digital Imaging Windows Programming Techniques Databases Signal and Image Processing AI/Expert Systems Microprocessors and many other courses	(800) 421-8166

INFORMATION EXCHANGE SYLLABUS

IT MANAGERS

Long Term Educational & Informational Programs

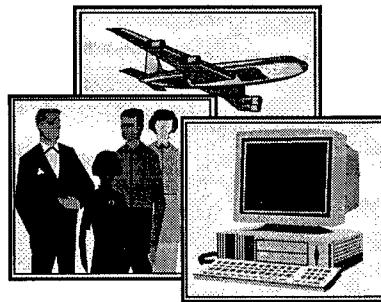
DESCRIPTION	PROVIDER	PHONE NO.
Reports and seminars that provide concise, balanced outside perspectives on the information technology industry.	Gartner Group	(203) 964-0096
Monthly newsletter to help with successful use of IT in business.	Business Technology - Tribeca Research Inc.	(212) 431-8700
The premier offering of the College is a 16 week long Advanced Management Program. Additionally, the College offers a series of intensive IRM courses, and special seminars, and workshops, focusing on critical IRM issues and directions.	DoD IRM College	(202) 287-9321
IS Leadership, Management, and Teambuilding. A series of 1-2 day seminars covering such areas as: Communication, Trust Building, Motivation & Empowerment, Team Problem Solving, Leadership, etc.	Gary Slaughter Corporation	(813) 925-0925
Bachelors, Masters, Doctoral and continuing education programs in Information Technology.	George Washington University George Mason University	(202) 994-5257 (703) 993-3400
Over 150 daytime courses in managerial and leadership development, information resources management, and total quality management.	USDA Graduate School - Center for Applied Management	(202) 447-7124
Provides a full range of packaged knowledge products for professional self-education and management training in IT issues.	James Martin Insight - Multimedia IT Training	(703) 620-9504
Graduate Certificate Program in IRM.	GSA in association with: George Washington University, American University, Catholic University, University of Maryland, and Syracuse University.	(202) 501-0190
Information systems professional career development plan created by the DPMA.	Data Processing Management Association - Professional Development Program	(708) 825-1693

Note: For additional information exchange opportunities, readers should check with local sources such as FAA organizations' training coordinators, FAA Human Resource Management organizations, professional organizations, local or community universities and colleges, and private vendors.

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APPENDIX D

INFORMATION EXCHANGE SYLLABUS FOR INFORMATION TECHNOLOGY SPECIALISTS



INFORMATION EXCHANGE SYLLABUS

FOCUS: Corporate Challenges--FAA & IT Mission

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
"Information Technology; Tools for Success"		The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.	FAA	
FAA and IT Vision and Strategic Plan	1 hour	Presentation: Overview of the current vision for FAA and IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.	FAA	
Presentation of FAA IT "success stories"	1 hour	Presentation: A successful implementation of IT in the FAA that highlights the advantages of the IT-provider business partnership.	FAA	
FAA Mission Orientation	1 day	A formal, structured session or a series of 1 hour presentations or videos, presenting speakers from all the business areas of FAA. They will discuss the operations of their business areas and how they support the mission of the FAA. A tour of a FAA field facility also will assist IT Specialist to better identify with the FAA mission.	FAA	

IT SPECIALISTS

FOCUS: Corporate Challenges--Planning and Management

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Understand the Technologies of Business Computing	1 day	A business oriented view of IT.	Technology Transfer Institute	(310) 394-8305
Rightsizing Information Systems	1 day	Empowering the changing organization with IT.	Performance Development Corporation	(800) 554-9131
Information Management: The Next Generation	4 days	How to manage IT into the 21st century.	Delphi Consulting Group	(617) 247-1025
Mapping the Future	2 day	Understanding and exploiting the dynamics of the computer industry, rather than just reacting.	Technology Transfer Institute	(310) 394-8305
Enterprise Engineering Workshop	1 day	Integrating your organization's strategic vision with TQM, BPR, and IE.	James Martin & Co.	(703) 620-9504

INFORMATION EXCHANGE SYLLABUS

IT SPECIALISTS

FOCUS: Corporate Challenges--Planning and Management (continued)

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
Business Process Reengineering	1 to 3 days	Provide managers with a basic understanding of how the application of BPR and IT can result in dramatic improvements; can also include "how to sessions" on doing BPR.	Andersen Consulting James Martin & Co. Performance Development Corporation Technology Transfer Institute USDA Graduate School James Martin & Co.	(512) 320-5871 (703) 620-9504 (800) 554-9131 (310) 394-8305 (202) 382-8565 (703) 620-9504
TQM	1 to 5 days	How to implement and manage a Total Quality Management Program.		

FOCUS: IT Management--IT Roles & Responsibilities

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
IT Management Philosophy	2 hours	A presentation to establish awareness of the IT management philosophy among IT specialists in the FAA. A video presentation is a possibility.	FAA	
Understand the Technologies of Business Computing	1 day	A business oriented view of IT.	Technology Transfer Institute	(310) 394-8305

FOCUS: IT Management--Federal Regulatory Environment

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
The FAA IT Regulatory Environment	3 hours	Seminar for IT Specialists on the current federal laws, regulations and guidelines that IT must operate under.	FAA	

INFORMATION EXCHANGE SOURCES

IT SPECIALISTS

FOCUS: Information Technologies--Using the Tools

DESCRIPTION	PROVIDER	PHONE NO.
Over 150 daytime courses in managerial and leadership development, information resources management, and total quality management.	USDA Graduate School - Center for Applied Management	(202) 447-7124
Over 150 daytime courses in computer literacy, programming, word processing, desktop publishing, microcomputer graphics, system analysis and design, hands-on microcomputer training, computer security, local area networking, and Macintosh training.	USDA Graduate School - Computer Sciences	(202) 447-7124
Seminars and conferences on current IT issues such as Data Warehouse, Object Orientation, Integrating Information Systems, Data Administration & Data Dictionary Seminar, All About Data Elements, etc.	Barnett Data Systems	(301) 762-1288
Short term courses in many aspects of IT such as data communications, software and systems development, electronic imaging, EDI, etc.	Information Systems Institute	(301) 670-9020
Video courses covering a wide range of IT subjects including RISC architecture, supercomputers, graphics architecture, EDI, design automation, and multiprocessors.	University Video Communications	(415) 327-0131
Provides a wide range of IT classes such as telecommunications, programming, CASE tools, networks, databases, microcomputers, imaging, systems design, computer security, etc.	Learning Tree	(800) 421-8166
Provides a wide range of IT classes such as networking, data communications, UNIX, and personal computer technology.	American Institute	(800) 345-801
Provides a wide range of IT classes such as programming, Object Oriented analysis and design, UNIX, networks, data communications, database design, etc.	Technology Exchange Company	(800) 662-4282
Provides a wide range of IT classes such as software management and development, Microsoft University, information engineering and modeling, client server and databases, and system management and performance.	Technology Transfer Institute	(310) 394-8305
Provides a wide range of IT classes such as programming and telecommunications.	Hands On Learning	(800) 248-9133
PC Applications/UNIX/programming instructional videos.	Micro Video Learning Systems	(800) 231-4021
Graduate Certificate Program in I&M	GSA in association with: George Washington University; American University; Catholic University; University of Maryland; and Syracuse University	(202) 501-0190

INFORMATION EXCHANGE SYLLABUS

LONG TERM EDUCATIONAL AND INFORMATIONAL PROGRAMS

IT SPECIALISTS

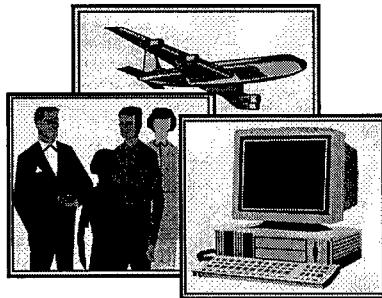
DESCRIPTION	PROVIDER	PHONE NO.
Monthly newsletter to help with successful use of IT in business. Bachelors, Masters, and continuing education programs in Information Technology.	Business Technology - Tribeca Research Inc. George Washington University George Mason University James Martin Insight - Multimedia IT Training	(212) 431-8700 (202) 994-5257 (703) 993-3400 (703) 620-9504
Provides a full range of packaged knowledge products for professional self-education and management training in IT issues.		
Information systems professional career development plan created by the DPMA.	Data Processing Management Association - Professional Development Program	(708) 825-1693

Note: For additional information exchange opportunities, readers should check with local sources such as FAA organizations' training coordinators, FAA Human Resource Management organizations, professional organizations, local or community universities and colleges, and private vendors.

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APPENDIX E

***INFORMATION EXCHANGE SYLLABUS
FOR
INFORMATION TECHNOLOGY CUSTOMERS
(INTERNAL & EXTERNAL)***



INFORMATION EXCHANGE SYLLABUS

IT CUSTOMERS--INTERNAL

FOCUS: Corporate Challenges			
TITLE	LENGTH	DESCRIPTION	PROVIDER
PHONE NO.			
"Information Technology; Tools for Success"		The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.	FAA
FAA and IT Strategic Vision and Plan	1 hour	Presentation: Overview of the current vision for FAA and IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.	FAA
Presentation of FAA IT "success stories"	1 hour	Presentation/Video: Successful implementations of IT in the FAA that highlights the advantages of the IT-provider business partnership.	FAA
FAA Mission Orientation	1 hour	Presentations/Video: Formal, structured sessions, presenting speakers from all the business areas of FAA. They will discuss the operations of their business area and how it supports the mission of the FAA.	FAA

FOCUS: Management of Information Technology			
TITLE	LENGTH	DESCRIPTION	PROVIDER
PHONE NO.			
IT Management	1 hour	Presentation: Establishes awareness of IT management in the FAA including planning, management, reporting, and oversight of internal and external responsibilities. This Session will highlight the advantages of the Business Community-IT partnership.	FAA

INFORMATION EXCHANGE SYLLABUS

IT CUSTOMERS--INTERNAL

FOCUS: <i>Information Technologies</i>			
TITLE	LENGTH	DESCRIPTION	PROVIDER
			PHONE NO.
FAA Emerging Technologies Brown Bag Lunch Series	1 hour each	Ongoing series of lunch-time sessions concerned with various IT issues and technologies including data architectures, paperwork management, repositories, hardware, and software. Training sessions on technologies that meet specific needs of the Others--Internal Audience to support their work assignments (e.g. software packages such as Microsoft Word or Excel, or use of the automated time and attendance system, etc.). This training is provided by the FAA or commercial sources and is arranged for by individual program offices.	FAA

INFORMATION EXCHANGE SYLLABUS

IT CUSTOMERS--EXTERNAL

FOCUS: Corporate Challenges

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
"Information Technology; Tools for Success"		The initial awareness is via a brochure that highlights the changing business environment, technological, and workforce environment.	FAA	
Presentation on FAA Strategic Vision and Plan	1 hour	Presentation: Overview of the current vision for FAA and IT in the FAA. Participants will understand the IT strategic plan and how it fits with the overall FAA strategic plan.	FAA	
Presentation of FAA IT "success stories"	1 hour	Presentation/Video: Successful implementations of IT in the FAA that highlights the advantages of the IT-provider business partnership.	FAA	

FOCUS: Management of Information Technology

TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
IT Management	1 hour	Presentation: Establishes awareness of IT management in the FAA including planning, management, reporting, and oversight of internal and external responsibilities. This session will highlight the advantages of the Business Community-IT partnership.	FAA	

INFORMATION EXCHANGE SYLLABUS

IT CUSTOMERS--EXTERNAL

FOCUS: Information Technologies

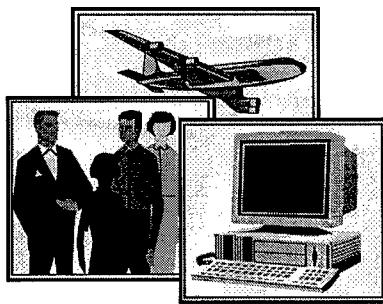
TITLE	LENGTH	DESCRIPTION	PROVIDER	PHONE NO.
FAA's Use of Information Technology	1/2-1 hour	Presentation (video, brochures, displays): How the FAA is planning for and using Information Technology.	FAA	

Note: For additional information exchange opportunities, readers should check with local sources such as FAA organizations' training coordinators, FAA Human Resource Management organizations, professional organizations, local or community universities and colleges, and private vendors.

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APPENDIX F

ACKNOWLEDGMENTS



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ACKNOWLEDGMENTS

The guide, Information Sharing: A Guide for the 21st Century, and accompanying syllabus of Information Exchange Competencies and Sources are a result of the collaboration and support of a number of individuals and organizations within the Federal Aviation Administration (FAA). To promote an agencywide view for developing this guide, the Office of Information Technology (AIT) established a Work Group of several program and regional representatives as well as the Chairperson of the Information Resources Managers Committee (IRMC). The efforts of all those involved are greatly appreciated.

Several people changed positions over the duration of this project. The individuals who participated in the different phases of the Work Group are:

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